

VCS MODULE VMD0025

ESTIMATION OF WOODY BIOMASS HARVESTING AND UTILIZATION

Version 1.0

16 November 2012

Sectoral Scope 14



Document Prepared by: The Earth Partners LLC.

TABLE OF CONTENTS

1	SOURCES.....	2
2	SUMMARY DESCRIPTION OF THE MODULE	2
3	DEFINITIONS.....	2
4	APPLICABILITY CONDITIONS	2
5	PROCEDURES.....	2
6	PARAMETERS.....	5
7	REFERENCES AND OTHER INFORMATION	5

1 SOURCES

None

2 SUMMARY DESCRIPTION OF THE MODULE

This module provides options for quantifying the amount of annual wood harvest occurring within the project area on an annual basis.

3 DEFINITIONS

Agent: A person or organization undertaking actions which impact the management of carbon pools and emissions.

Complete Harvest Inventory: Inventory of wood products based on the knowledge of total harvest.

Partial Harvest Inventory: Inventory of wood products based on known fraction of total harvest. Known fraction can be used to extrapolate to total harvest.

Project Area: The area or areas of land on which the project proponent will undertake the project activities

Remote Sensing and Forest Inventory: Inventory of wood biomass harvested using remote sensing and forest inventory data.

4 APPLICABILITY CONDITIONS

None

5 PROCEDURES

Introduction:

Wood harvest from an area can be quantified in a number of ways. The following steps are hierarchical, with the most preferred (most accurate) method being given first, and a series of less preferred options being given as subsequent methods.

Option 1 must be used if complete records are available. If incomplete records are available, use Option 2. If no records are available, use Option 3.

The output of this module is a table for each of the years for which data is gathered, showing the volume of timber extracted from within the project area by species and grade ($V_{ex,ty,j,i}$). In some cases, where measurement systems include adjustment factors for defects such as mill losses (eg, the hoppus system, which estimates log volumes in terms of net milled timber volumes rather than total volume), data from

these measurement systems must be adjusted using an appropriate factor, to generate data on the total volume extracted.

Option 1 – Complete harvest inventory

This option must be used if complete records showing the location(s) of harvesting, the amount and grade of each species harvested from each location are available. These records may be available:

- From the agent(s) undertaking the harvesting;
- From the wood buyers, mills, or other users;
- From government records for taxation or other purposes;
- From certifying bodies or other third parties; or,
- From a combination of these sources.

If these records are available, they must be checked against remote sensing images, field surveys, or available forest inventories to ensure that the data reported correlates with what is found in the field. If discrepancies are found, the reason for these discrepancies should be discussed with the parties providing the information, to determine if a reason exists for the discrepancy.

Where a discrepancy exists which is not explicable by the parties providing the inventories, the project proponent must choose the most conservative of values, and document the nature of the discrepancy.

Option 2 – Partial harvest inventory

This option must be used where some inventory of actual harvest is available, but where complete records are not available (eg. species and grade breakdowns). This will typically occur where:

- Records of the volumes harvested are available, but species and grade breakdowns are partially or wholly missing.
- Records of harvest are only available for some of the areas harvested.
- Records of harvest are available for some agents, but not others.

Where data is available from harvest records, the available data must be used, subject to the checking described in Option 1. Missing data must be filled in as set out below.

Where data for species and grade breakdowns are missing, species and grade breakdowns can be filled in from:

- Forest inventory data for the areas harvested gathered prior to harvest.
- Typical species and grade breakdowns from the area, based on mill records, records from regulatory bodies, breakdowns from forest inventories for other areas, or existing research.
- Regional estimates.

Where data for volumes from some areas are missing, data can be filled in from:

- Forest inventory data for the areas harvested gathered prior to harvest.
- Volume data for other, parallel areas.

- Forest inventory data from other, parallel areas.
- Regional estimates.

Where data on the forest harvest by some agents are missing, data can be filled in from:

- Maps, remote sensing or ground surveys to delineate the areas harvested and to estimate the intensity of harvest.
- Volume, species and grade data from other agents working in the area, or from forest inventories, adjusted for observed differences in forest type or logging intensity.
- Regional estimates of per hectare volume, species and grade breakdowns.

Where-ever possible more than one source should be used to check data, and conservative estimates should be used.

Option 3 – Remote sensing and forest inventory

Where no inventory of harvested wood is available, project proponents must estimate values for the missing data based on estimation as set out below.

Where no data on areas harvested and timing of harvest are available, estimate values of missing data from:

- Maps, remote sensing or ground surveys.

Where no data on intensity of harvest are available, estimate values of missing data from:

- Remote sensing or ground surveys.

Where no data on wood removed per unit of area, by species, are available, estimate values of missing data from:

- Forest inventories from the areas logged or similar areas within the project area.
- Existing harvest data from other harvest operations working in the vicinity of the project area, in similar ecotypes and stands.
- Existing forest inventories from areas in the vicinity of the project area, in similar ecotypes and stands.
- Regional estimates of per hectare volume extracted from forests of these types.

Where no data on grade breakdowns are available, estimate values of missing data from:

- Forest inventories from the areas logged or similar areas within the project area.
- Existing grade breakdowns from other harvest operations working in the vicinity of the project area, in similar ecotypes and stands, or from mills or buyers of wood from these operations
- Existing forest inventories from areas in the vicinity of the project area, in similar ecotypes and stands.
- Regional estimates of grade breakdowns from forests of these types.

6 PARAMETERS

Data Unit / Parameter:	$V_{ex,ty,j,t}$
Data unit:	m ³
Description:	Volume of timber extracted from within the project area (does not include slash left onsite) by species <i>j</i> and wood product class <i>ty</i> at time <i>t</i>
Source of data:	Described in this module
Justification of choice of data or description of measurement methods and procedures applied:	Described in this module
Any comment:	

7 REFERENCES AND OTHER INFORMATION

None

DOCUMENT HISTORY

Version	Date	Comment
v1.0	16 Nov 2012	Initial version released